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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,588	01/23/2001	Hiroshi Niwa	JP9-2000-0068US1 (8728-47)	2738
46069	7590	06/15/2006	EXAMINER	
F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			TON, MINH TOAN T	
			ART UNIT	PAPER NUMBER

2871

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/767,588

Applicant(s)

NIWA ET AL.

Examiner

Toan Ton

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/27/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8,9 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) 6,8,9 and 18-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Election/Restriction

1. An election of species Ia comprising claims 1-3, 5 and 16-17 is acknowledged. Thus, species Ib (claims 9, 20-24) and species II (claims 6, 8, 18-19) are withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Saito et al (US 6304308).

Saito discloses a liquid crystal display having a first substrate and a second substrate (e.g., SUB1, SUB2) which are disposed with a predetermined gap therebetween, in which liquid crystal (LC) is sealed in the gap comprising: post structures (e.g., SPC-P) for controlling the gap between the first substrate and the second substrate; a sealing material (e.g., SL) provided outside a display area for sealing the liquid crystal in the gap, an end-sealing material (e.g., INJ) for sealing said injection hole after the liquid crystal is sealed in; and injection hole post structures (e.g., SPC-Ps near an area of the injection hole) provided in an area near the injection hole of the same material as post-structures, wherein the injection hole post structures provided near an area of the injection hole are arranged in a plurality of rows and columns (see at least

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Figure 4).

Saito discloses the liquid crystal display comprising injection hole post structures formed with a height lower than the height of the gap formed by the first substrate and the second substrate (see at least Figure 1).

Saito discloses SUB2 comprising a color filter substrate (see at least col. 10, lines 42-43).

Saito discloses the injection hole filled with end-sealing material and injection hole post structures inside the injection hole (see Figure 4).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito as applied to claims 1, 3 and 5 above, and further in view of Ohashi (US 5798813).

Ohashi discloses a liquid crystal display device comprising seals having a pitch of 1.5-3 mm and the space formed by the injection post structures 0.3 mm (i.e., greater than double the width), wherein the device yields advantages such as minimizing the turbulence in a flow of the liquid crystal making the flow uniform. Therefore, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ a particular configuration of the injection post structures for achieving advantages such as minimizing the turbulence in a flow of the liquid crystal making the flow uniform.

Response to Arguments

4. Applicant's arguments filed 11/25/05 have been fully considered but they are not persuasive.

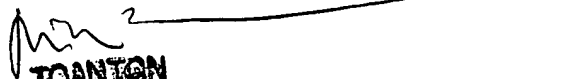
Saito discloses a liquid crystal display having injection hole post structures (e.g., SPC-Ps near an area of the injection hole) provided in an area near the injection hole of the same material as post-structures, wherein the injection hole post structures provided near an area of the injection hole are arranged in a plurality of rows and columns (see at least Figure 4).

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 7, 2006


TOANTON
PRIMARY EXAMINER